

$$\boxed{9} \quad 2.5e^{-1.2x} = 1 \Rightarrow e^{-1.2x} = \frac{1}{2.5} \Rightarrow \ln e^{-1.2x} = \ln \frac{1}{2.5} \Rightarrow -1.2x = \ln \frac{1}{2.5} \Rightarrow$$

$$x = -\frac{1}{1.2} \ln \frac{1}{2.5} = -\frac{5}{6} \ln \frac{2}{5} \approx 0.7636$$